



PATENT bends2.d01

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Louis T. Klauder, Jr. :

Application No. 10/506,708 :

Filed: September 7, 2004 :

For a Patent for a :

METHOD FOR DESIGNING GENERALIZED

SPIRALS, BENDS, JOGS, AND WIGGLES FOR RAILROAD TRACKS AND VEHICLE

GUIDEWAYS : December 10, 2004

PRELIMINARY AMENDMENT AND INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Prior to examination, kindly amend the above-identified patent application as shown below. Pursuant to the requirements of 37 C.F.R. §1.121, amendments to the specification are shown on page 2. This is followed by Remarks and a listing of information which may be considered "material to patentability" in examining this patent application, in accordance with the provisions of 37 C.F.R. §1.56.

IN THE SPECIFICATION

Please insert the following paragraph before the first line of page 1, following the title:

CROSS-REFERENCE TO RELATED APPLICATIONS

This application claims the benefit of U.S.

Provisional Application No. 60/368,952, filed March 29, 2002;

U.S. Provisional Application No. 60/371,842, filed April 11,

2002; U.S. Provisional Application No. 60/388,859, filed June

17, 2002; and U.S. Provisional Application No. 60/391,638, filed

June 27, 2002.

Remarks

Prior to examination, entry of the foregoing amendment is respectfully requested in accordance with the provisions of 37 C.F.R. §1.115. The amendment is presented to reference the claim to the benefit of the filing date of four (4) earlier-filed U.S. Provisional Applications, which was originally made in the Declaration submitted for the present U.S. Patent Application, in accordance with the provisions of 37 C.F.R. §1.78.

This paper is also being filed to advise the U.S. Patent Office of information which may be considered "material to patentability" in examining this patent application, in accordance with the provisions of 37 C.F.R. §1.56.

This application is derived from International Application No. PCT/US2003/009667, and was filed pursuant to 35 U.S.C. §371. The following documents are noted for being cited in the Search Report issued during the international phase of the PCT application.

U.S. Patents

5,791,254 (Mares et al.) - Issued: August 11, 1998

4,860,666 (Smith) - Issued: August 29, 1989

4,693,183 (Pötzsch) - Issued: September 15, 1987

Other Documents

Ahmadian, Mehdi, "Filtering Effects of Mid-Cord Offset Measurements on Track Geometry Data", Proceedings of the 1999

ASME/IEEE Joint Railroad Conference, pages 157-61 (1999).

Copies of these documents should already have been received by the U.S. Patent Office, and a PTO-1449 form (1) is enclosed with this Information Disclosure Statement to facilitate the Examiner's acknowledgement of the above-listed documents.

The U.S. Patent Office is further informed of commonly owned, co-pending U.S. Patent Application No. 10/311,613, filed December 17, 2002, which has not yet been examined. U.S. Patent Application No. 10/311,613 was derived from an International Application, No. PCT/US01/41074, having an International Filing Date of June 20, 2001.

An Information Disclosure Statement has been filed in U.S. Patent Application No. 10/311,613 which identifies documents cited in a Search Report issued for International Application No. PCT/US01/41074 and documents cited in the specification for U.S. Patent Application No. 10/311,613. The issued Search Report cites the same four documents, listed above, which were cited in the Search Report issued for International Application No. PCT/US2003/009667. The following are the documents cited in the specification for U.S. Patent Application No. 10/311,613.

Other Documents

Kufver, Björn, VTI Report 420A, "Mathematical Description of Railway Alignments and Some Preliminary Comparative Studies", Swedish National Road and Transport Research Institute (1997), pages 1-4, 9-12 and 41-60.

Presle, Gérard, et al., "Entwicklung und Grundlagen neuer Gleisgeometrie", ZEV + DET Glas. Ann. 122 (1998) 9/10, September/October, pages 579-86.

Copies of the cited portions of these documents are enclosed for consideration in this matter. To provide the concise explanation of the relevance of non-English language documents which is required by 37 C.F.R. §1.98(a)(3)(i), the German language document is submitted for its discussion of a technique which has been proposed, and proven in practice, for substantially improving spiral performance by raising the roll axis (i.e., the longitudinal axis about which the track is rotated for purpose of changing the roll angle) above the plane of the track.

The following documents, which are cited in the specification for the present U.S. Patent Application, are additionally being submitted for consideration.

Other Documents

Abramowitz, Milton, et al., <u>Handbook of Mathematical</u>
<u>Functions</u>, National Bureau of Standards, Applied Mathematics
Series 55, pp. 773 to 775, U.S. Government Printing Office,
Washington, D.C. (1964).

Baluch, Henryk, "Optimation of Transition Length Increase", Rail International, October 1982, pp. 12 to 19.

Consideration of the above-listed documents is respectfully requested under 37 C.F.R. §1.56(a)(2), and it is further respectfully requested that the Examiner acknowledge consideration of these documents by initialing the PTO-1449 form which is enclosed with this Information Disclosure Statement and which additionally lists these documents.

It is respectfully requested that the Examiner provide applicant with an initialed copy of the enclosed PTO-1449 form to confirm consideration of the documents listed.

Respectfully submitted,

I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as first class mail in an envelope addressed to "Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450" on December 10, 2004.

Date: 12/10/04

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	AC	4	6	9	3	1	8	3	09/15/87	Pötzsch							
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	AN	Ahmadian, Mehdi, "Filtering Effects of Mid-Cord Offset Measurements on Track Geometry Data", Proceedings of the 1999 ASME/IEEE Joint Railroad Conference, pages 157-61 (1999)															
	AO	Baluch, Henryk, "Optimation of Transition Length Increase", Rail International, October 1982, pp. 12 to 19															
	АР	Kufver, Björn, VTI Report 420A, "Mathematical Description of Railway Alignments and Some Preliminary Comparative Studies", Swedish National Road and Transport Research Institute (1997), pages 1-4, 9-12 and 41-60															
	AQ	Presle, Gérard, et al., "Entwicklung und Grundlagen neuer Gleisgeometrie", ZEV + DET Glas. Ann. 122 (1998) 9/10, September/October, pages 579-86															
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